

INTERNATIONAL COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 25 April 2001 (25.04.01)	
International application No. PCT/US00/22655	Applicant's or agent's file reference RCA 89732
International filing date (day/month/year) 18 August 2000 (18.08.00)	Priority date (day/month/year) 18 August 1999 (18.08.99)
Applicant LIEBHOLD, Valerie, Sacrez	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

05 March 2001 (05.03.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer Juan Cruz</p> <p>Telephone No.: (41-22) 338.83.38</p>
--	---

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference RCA 89732	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/ 22655	International filing date (day/month/year) 18/08/2000	(Earliest) Priority Date (day/month/year) 18/08/1999
Applicant THOMSON LICENSING S.A. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

4



None of the figures.

INTERNATIONAL SEARCH REPORT

Intern. Application No
PCT/US 00/22655

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F3/023

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F B41J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 99 46563 A (MAGELLAN DIS INC) 16 September 1999 (1999-09-16) page 2, line 25 -page 3, line 24 page 5, line 12 -page 9, line 7; figures 2-5	6-20
X	US 4 444 520 A (HANAKATA TAKAYOSHI ET AL) 24 April 1984 (1984-04-24) column 4, line 65 -column 6, line 20 column 11, line 67 -column 12, line 29; figure 16	1-5
X	DE 345 365 C (STACKE) 10 December 1921 (1921-12-10) the whole document	1,2,4
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *8* document member of the same patent family

Date of the actual completion of the international search

14 November 2000

Date of mailing of the international search report

27/11/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Ziegler, H-J

INTERNATIONAL SEARCH REPORT

Intern. Application No
PCT/US 00/22655

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 858 023 A (MICROSOFT CORP) 12 August 1998 (1998-08-12) column 3, line 57 -column 4, line 49; figure 6	6-20
A	FR 924 048 A (WEYDERT) 8 August 1947 (1947-08-08) the whole document	1-5

INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern. Application No

PCT/US 00/22655

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9946563 A	16-09-1999	US 6037942 A AU 2873399 A	14-03-2000 27-09-1999
US 4444520 A	24-04-1984	JP 50115929 A JP 50115930 A DE 2507603 A NL 7502114 A US 4253774 A	10-09-1975 10-09-1975 28-08-1975 26-08-1975 03-03-1981
DE 345365 C		NONE	
EP 0858023 A	12-08-1998	NONE	
FR 924048 A	08-08-1947	NONE	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

US 00/22655

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9946563	A	16-09-1999	US	6037942 A	14-03-2000
			AU	2873399 A	27-09-1999
US 4444520	A	24-04-1984	JP	50115929 A	10-09-1975
			JP	50115930 A	10-09-1975
			DE	2507603 A	28-08-1975
			NL	7502114 A	26-08-1975
			US	4253774 A	03-03-1981
DE 345365	C		NONE		
EP 0858023	A	12-08-1998	NONE		
FR 924048	A	08-08-1947	NONE		

¹⁶
Claims
REPLACED BY
ART 34 AMDT

1. A data entry device comprising:

a body; and

5 a plurality of selectable keys retained by said body and correlated to an X-Y coordinate system, each of said plurality of keys having a particular coordinate value within the X-Y coordinate system, one of said plurality of keys defining a maximum positive ordinate value, a second one of said plurality of keys defining a maximum negative ordinate value, a third one of said plurality of keys defining
10 a maximum positive abscissa value, and a fourth one of said plurality of keys defining a maximum negative abscissa value, wherein each key of a remainder of said plurality of keys has a coordinate value associated with a distance from an origin of the X-Y coordinate system that is less than or equal to one of said maximum positive ordinate value, said maximum negative ordinate value, said
15 maximum positive abscissa value, and said maximum negative abscissa value.

2. The data entry device of claim 1, wherein said plurality of keys form an alphabet.

20 3. The data entry device of claim 2, wherein said plurality of keys are arranged in alphabetical order.

4. The data entry device of claim 1, wherein said plurality of keys form an alphanumeric data entry system.

25

5. The data entry device of claim 4, wherein a portion of said plurality of keys form an alphabet in alphabetical order.

PATENT COOPERATION TREATY

EXPRESS EL 97321400 US

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

TRIPOLI, Joseph S.
THOMSON MULTIMEDIA LICENSING INC.
P.O. Box 5312
Princeton, New Jersey 08540
ETATS-UNIS D'AMERIQUE

TO/PGT Rec'd 12 FEB 2002

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

RECEIVED

NOV 19 2001

IS&S

Date of mailing
(day/month/year)

12.11.2001

Applicant's or agent's file reference
RCA 89732

IMPORTANT NOTIFICATION

International application No.
PCT/US00/22655

International filing date (day/month/year)
18/08/2000

Priority date (day/month/year)
18/08/1999

Applicant

THOMSON LICENSING S.A. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Event	Final Country Selection
Deadline	18 Dec 2001
Entered	DPF 11/20/01
Authorized officer	

Name and mailing address of the IPEA/

European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Garry, A

Tel. +49 89 2399-2375



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference RCA 89732		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) FOR FURTHER ACTION	
International application No. PCT/US00/22655	International filing date (day/month/year) 18/08/2000	Priority date (day/month/year) 18/08/1999	
International Patent Classification (IPC) or national classification and IPC G06F3/023			
Applicant THOMSON LICENSING S.A. et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 05/03/2001	Date of completion of this report 12.11.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Ziegler, H-J Telephone No. +49 89 2399 2894 <div data-bbox="1396 1837 1550 1984" data-label="Image"> </div>

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/22655

I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*

Description, pages:

1-15 as originally filed

Claims, No.:

6-20 as originally filed

1-5 as received on 11/09/2001 with letter of 07/09/2001

Drawings, sheets:

1/5-5/5 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/22655

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-20
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-20
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

**2. Citations and explanations
see separate sheet**

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/22655

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Claims 1-5

D2 (US-A-4444520) shows (col.11, l.54 onwards, fig.16) a data entry device comprising a body (2) and a plurality of selectable keys (6) retained by said body and correlated to an X-Y-coordinate system (place X-Y axis diagonally on key block (6)), one of said keys defining a maximum positive ordinate value ("E"), a second one of said plurality of keys defining a maximum negative ordinate value ("A"), a third one of said plurality of keys defining a maximum positive abscissa value ("T"), a fourth one of said plurality of keys defining a maximum negative abscissa value ("O"), wherein each key of a remainder of said plurality of keys has a coordinate value associated with a distance from an origin of the x-Y-coordinate system that is less than one of said maximum positive ordinate value, said maximum negative ordinate value, said maximum positive abscissa value, and said maximum negative abscissa value.

The subject matter of claim 1 differs from this data entry device in that the coordinate value of the keys are integer values, and that the maximum positive/ negative ordinate and abscissa values are also integer values.

The problem to be solved may be seen in providing an alternative arrangement for data entry in a minimum of time.

The present application does therefor fulfil the requirements of Art. 33(1) and 33(2) PCT, because the subject matter of claim 1 is novel.

To adopt such an integer value arrangement in the device of D2 is not obvious in the view of the prior art because it would lead to a larger area needed for the keys on the hand held data entry device which would clearly make the use of the device more cumbersome for the user.

The present application does therefor fulfil the requirements of Art 33(1) and 33(3) PCT, because the subject matter of claim 1 involves an inventive step. Consequently,

since claims 2-5 are dependent of claim 1, they also meet the respective requirements of the PCT.

Claims 6 - 20

Claim 6 relates to a method of data entry. The most relevant prior art is considered to be EP-A-0858023 (D3).

It shows a method of data entry comprising:

- depicting a data entry screen on a display, the data entry screen showing a plurality of keys;
- allowing user selection of any one of said plurality of keys;
- repeating these steps until an end of user selection.

It further shows a character entry area (37 - fig.6) centrally located relative to said plurality of keys; making said centrally located area a starting point; and returning to said centrally located area after user selection of any one of said plurality of keys.

Hence the difference between the subject matter of claim 6 and the device of D3 is that the centrally located character entry area replaced by a key.

The problem solved is to speed up the data entry process.

The solution to place a key in the central area of D3 is not suggested by the remainder of the prior art in the context of screen data entry processes.

The solution therefor involves an inventive step and hence fulfils the requirements of Art 33(1) and 33(3) PCT.

Claim 14 although formulated as an independent claim includes all the features of claim 6 and hence is in fact a dependent claim. This and all the other dependent claims of claim 6 as well meet the respective requirements of the PCT.

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference RCA 89732	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/22655	International filing date (day/month/year) 18/08/2000	Priority date (day/month/year) 18/08/1999
International Patent Classification (IPC) or national classification and IPC G06F3/023		
Applicant THOMSON LICENSING S.A. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 05/03/2001	Date of completion of this report 12.11.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Ziegler, H-J Telephone No. +49 89 2399 2894 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/22655

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-15 as originally filed

Claims, No.:

6-20 as originally filed

1-5 as received on 11/09/2001 with letter of 07/09/2001

Drawings, sheets:

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/22655

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-20
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-20
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

- 2. Citations and explanations
see separate sheet**

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/22655

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Claims 1-5

D2 (US-A-4444520) shows (col.11, l.54 onwards, fig.16) a data entry device comprising a body (2) and a plurality of selectable keys (6) retained by said body and correlated to an X-Y-coordinate system (place X-Y axis diagonally on key block (6)), one of said keys defining a maximum positive ordinate value ("E"), a second one of said plurality of keys defining a maximum negative ordinate value ("A"), a third one of said plurality of keys defining a maximum positive abscissa value ("T"), a fourth one of said plurality of keys defining a maximum negative abscissa value ("O"), wherein each key of a remainder of said plurality of keys has a coordinate value associated with a distance from an origin of the x-Y-coordinate system that is less than one of said maximum positive ordinate value, said maximum negative ordinate value, said maximum positive abscissa value, and said maximum negative abscissa value.

The subject matter of claim 1 differs from this data entry device in that the coordinate value of the keys are integer values, and that the maximum positive/ negative ordinate and abscissa values are also integer values.

The problem to be solved may be seen in providing an alternative arrangement for data entry in a minimum of time.

The present application does therefor fulfil the requirements of Art. 33(1) and 33(2) PCT, because the subject matter of claim 1 is novel.

To adopt such an integer value arrangement in the device of D2 is not obvious in the view of the prior art because it would lead to a larger area needed for the keys on the hand held data entry device which would clearly make the use of the device more cumbersome for the user.

The present application does therefor fulfil the requirements of Art 33(1) and 33(3) PCT, because the subject matter of claim 1 involves an inventive step. Consequently,

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/22655

since claims 2-5 are dependent of claim 1, they also meet the respective requirements of the PCT.

Claims 6 - 20

Claim 6 relates to a method of data entry. The most relevant prior art is considered to be EP-A-0858023 (D3).

It shows a method of data entry comprising:

- depicting a data entry screen on a display, the data entry screen showing a plurality of keys;
- allowing user selection of any one of said plurality of keys;
- repeating these steps until an end of user selection.

It further shows a character entry area (37 - fig.6) centrally located relative to said plurality of keys; making said centrally located area a starting point; and returning to said centrally located area after user selection of any one of said plurality of keys.

Hence the difference between the subject matter of claim 6 and the device of D3 is that the centrally located character entry area replaced by a key.

The problem solved is to speed up the data entry process.

The solution to place a key in the central area of D3 is not suggested by the remainder of the prior art in the context of screen data entry processes.

The solution therefor involves an inventive step and hence fulfils the requirements of Art 33(1) and 33(3) PCT.

Claim 14 although formulated as an independent claim includes all the features of claim 6 and hence is in fact a dependent claim. This and all the other dependent claims of claim 6 as well meet the respective requirements of the PCT.

19
Claims

1. A data entry device comprising:

a plurality of selectable keys retained by said body and correlated to
5 an X-Y coordinate system, each of said plurality of keys having particular
integer X and Y coordinate values within said coordinate system, one of
said plurality of keys defining a maximum positive integer ordinate
value, a second one of said plurality of keys defining a maximum
negative integer ordinate value, a third one of said plurality of keys
10 defining a maximum positive integer abscissa value, and a fourth one of
said plurality of keys defining a maximum negative integer abscissa
value, wherein each key of the remainder of said keys has X and Y
integer coordinate values associated with a distance from an origin of
the X-Y coordinate system that is less than or equal to one of said
15 maximum positive integer ordinate value, said maximum negative
integer ordinate value, said maximum positive integer abscissa value
and said maximum negative integer abscissa value.

20 2. The data entry device of claim 1, wherein said plurality of keys form
an alphabet.

3. The data entry device of claim 2, wherein said plurality of keys are
arranged in alphabetical order.

25 4. The data entry device of claim 1, wherein said plurality of keys form
an alpha-numeric data entry system.

5. The data entry device of claim 4, wherein a portion of said plurality of
keys form an alphabet in alphabetical order.

30